

MODIS IOT Weekly Report

Mission Operations Days: 2000/155 to 2000/161

June 3, 2000 20:00:00 GMT to June 9, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has no known Anomalies

| | | |
|-------------------------|---------------------|---------|
| Blackbody | A On; B Off | Nominal |
| Calibration Electronics | A On; B Off | Nominal |
| Control Processor | A On; B Off | Nominal |
| Door: Nadir | Unlatched, open | Nominal |
| Space View | Unlatched, open | Nominal |
| Solar Diffuser | Unlatched, closed | Nominal |
| FDDI Formatter | A On; B off | Nominal |
| FIFO Memory | 1 & 2 On; 3 & 4 Off | Nominal |
| Format Processor | A On; B off | Nominal |
| PC FPA | A On | Nominal |
| Power Supply: 1 | On | Nominal |
| 2 | Off | Nominal |
| PV FPAs: VIS | A On | Nominal |
| NIR | A On | Nominal |
| SMIR | A On | Nominal |
| LWIR | A On | Nominal |
| Radiative Cooler: | | |
| Outgas Heaters | Off | Nominal |
| LWIR FPA Heater | On | Nominal |
| SMIR FPA Heater | Off | Nominal |
| Scan Assembly | A On; B off | Nominal |
| SDSM | Off | Nominal |
| SRCA | Off | Nominal |
| Survival Heaters: PS1 | Enabled | Nominal |
| PS2 | Enabled | Nominal |
| Timing Generator | A On; B Off | Nominal |
| Flight Software | Rev BD | Nominal |
| Inhibit Ids Set | None | Nominal |
| TMONs enabled | 66,67 | Nominal |

This Week's Completed MODIS Activities:

Saturday, June 3, 2000

None

Sunday, June 4, 2000

None

Monday, June 5, 2000

157/10:44:50 ATC OA15 SD/SDSM Open
157/11:36:24 ATC OA19 SRCA Full Radiometric
157/12:00:00 ATC - Blackbody to 270K
157/12:23:43 ATC OA16 SD/SDSM Screened

Tuesday, June 6, 2000

158/06:00:00 ATC Blackbody to 280K
158/10:00:00 ATC Blackbody to 285K
158/12:00:00 ATC Blackbody to 290K
158/13:31:49 Real-time Set Blackbody duty cycle to 100%
158/14:00:00 ATC Blackbody to 295K
158/16:00:00 ATC Blackbody to 300K
158/18:00:00 ATC Blackbody to 315K
158/20:00:00 ATC Blackbody to 270K
158/20:22:23 Real-time Set Blackbody duty cycle to 33%

Wednesday, June 7, 2000

159/10:32:24 ATC OA16 SD/SDSM Screened
159/11:23:57 ATC OA23 SRCA Full Spatial
159/19:00:00 ATC Blackbody to 290K

Thursday, June 8, 2000

None

Friday, June 9, 2000

161/08:41:06 ATC OA16 SD/SDSM Screened
161/09:29:36 ATC OA22 SRCA Full Spectral, 30W part I
161/11:24:23 ATC OA22 SRCA Full Spectral, 30W part II
161/13:46:50 ATC OA22 SRCA Full Spectral, 10W part I
161/14:42:09 ATC OA22 SRCA Full Spectral, 10W part II

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Saturday, June 10, 2000

None

Sunday, June 11, 2000

None

Monday, June 12, 2000

164/05:54:08 ATC OA15 SD/SDSM Open
164/12:29:39 ATC OA16 SD/SDSM Screened
164/20:02:00 ATC - Blackbody to 270K

Tuesday, June 13, 2000

165/14:00:00 ATC Blackbody to 315K
165/14:?? Real-time Set Blackbody duty cycle to 100%
165/21:00:00 ATC Blackbody to 270K
165/21:?? Real-time Set Blackbody duty cycle to 33%

Wednesday, June 14, 2000

166/?? ATC OA16 SD/SDSM Screened
166/19:00:00 ATC Blackbody to 290K

Thursday, June 15, 2000

None

Friday, June 16, 2000

168/?? ATC OA16 SD/SDSM Screened

Maneuvers:

Tue, June 20, 2000 – Drag Makeup Maneuver

Wed, June 21, 2000 – MODIS Roll #1 (2000/173/21:50:10 – 21:56:40), roll degree = -18.0044

Wed, June 21, 2000 – MODIS Roll #2 (2000/173/23:28:43 – 23:35:13), roll degree = -17.4518

Wed, June 21, 2000 – MODIS Roll #3 (2000/174/01:07:16 – 01:13:46), roll degree = -16.9070

MODIS Anomalies:

None.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

Telemetry is nominal.

Non-MODIS Significant Events:

Science Data Losses 159/20:00 – 160/20:00:

4,6362 CADUs of MODIS (equivalent to 31 sec. Day Mode) lost at 160/16:32:33z due to FOT Ops. Error. FOT failed to implement workaround for very high MODIS Buffer amount (86% full). Lockup loss was overwritten before it could be played back.

Additional setbacks from the Ampex tape drive anomalies at White Sands have resulted in numerous data processing backlogs. The following days are still being processed (in the order listed):

147-150, 131-136

Limited Life Item Status:

SRCA 10W Lamp #1: 166.7 of 500 hours

SRCA 10W Lamp #2: 132.7 of 500 hours

SRCA 10W Lamp #3: 141.9 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 554.6 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1363 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements